

SEQUENCE LISTING

<110> Mueller, John P.
Baima, Eric T.

<120> HAR A NUCLEIC ACIDS, POLYPEPTIDES, AND RELATED METHODS
AND USES THEREOF

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<170> PatentIn Ver. 2.1

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Arg Leu Leu Gln Lys Gln Leu Asp Tyr Gln Gly Glu Ile Leu His Gln
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Val Asp Phe Val Tyr Phe Pro Gln Thr Val Ala Glu Glu Gln Gln Leu
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Thr Tyr Tyr Val Leu Gln Glu Val Thr Ser Phe Glu Gln Trp Glu Leu
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Pro Phe Ser Ser Leu Ser Gly Gly Glu Lys Thr Lys Val Leu Leu Gly
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Asn His Leu Asp Leu Ala Gly Arg Gln Gln Val Ala Glu Tyr Leu Lys
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Arg Ala Val Phe Thr Asn Arg Ile Glu Gln Met Ser Met Gly Gln Arg
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<213> Bacillus subtilis

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Ile Gly Ile Ile Gly Lys Asn Gly Ala Gly Lys Ser Thr Leu Leu His
35 40 45

Leu Ile His Asn Asp Leu Ala Pro Ala Gln Gly Gln Ile Leu Arg Lys
50 55 60

Asp Ile Lys Leu Ala Leu Val Glu Gln Glu Thr Ala Ala Tyr Ser Phe
65 70 75 80

Ala Asp Gln Thr Pro Ala Glu Lys Lys Leu Leu Glu Lys Trp His Val
85 90 95

Pro Leu Arg Asp Phe His Gln Leu Ser Gly Gly Glu Lys Leu Lys Ala
100 105 110

Arg Leu Ala Lys Gly Leu Ser Glu Asp Ala Asp Leu Leu Leu Asp
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Glu Pro Thr Asn His Leu Asp Glu Lys Ser Leu Gln Phe Leu Ile Gln
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Gln Leu Lys His Tyr Asn Gly Thr Val Ile Leu Val Ser His Asp Arg
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Tyr Phe Leu Asp Glu Ala Ala Thr Lys Ile Trp Ser Leu Glu Asp Gln
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Thr Leu Ile Glu Phe Lys Gly Asn Tyr Ser Gly Tyr Met Lys Phe Arg
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Glu Lys Lys Arg Leu Thr Gln Gln Arg Glu Tyr Glu Lys Gln Gln Lys
195 200 205

Met Val Glu Arg Ile Glu Ala Gln Met Asn Gly Leu Ala Ser Trp Ser
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Glu Lys Ala His Ala Gln Ser Thr Lys Lys Glu Gly Phe Lys Glu Tyr
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His Arg Val Lys Ala Lys Arg Thr Asp Ala Gln Ile Lys Ser Lys Gln
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Lys Arg Leu Glu Lys Glu Leu Glu Lys Ala Lys Ala Glu Pro Val Thr

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Pro Glu Tyr Thr Val Arg Phe Ser Ile Asp Thr Thr His Lys Thr Gly
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305 310 315 320

Ala Ile Ile Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Leu Asn Ile
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Ile Leu Gly Gln Glu Thr Ala Glu Gly Ser Val Trp Val Ser Pro Ser
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Ala Asn Ile Gly Tyr Leu Thr Gln Glu Val Phe Asp Leu Pro Leu Glu
355 360 365

Gln Thr Pro Glu Glu Leu Phe Glu Asn Glu Thr Phe Lys Ala Arg Gly
370 375 380

His Val Gln Asn Leu Met Arg His Leu Gly Phe Thr Ala Ala Gln Trp
385 390 395 400

Thr Glu Pro Ile Lys His Met Ser Met Gly Glu Arg Val Lys Ile Lys
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